FACULTY PROFILE

1. Personal Details

NAME	**Dr. GAYATRI SAKYA**
DEPARTMENT	ELECTRONICS & COMMUNICATION ENGINEERING
DESIGNATION	ASSISTANT PROFESSOR-2
PHONE	9990274390
EMAIL ID	gayatrisakya@jssaten.ac.in
Date of Joining (JSSATEN)	01-02-2006

2. Experience

Total Experience in Years: 18	Teaching: 16 Years	Industry: 2 Years	Research: 10 Years

3. Qualifications

COURSES	SPECIALIZATION	Year of Award	INSTITUTION	UNIVERSITY
B.E.	Electronics Engineering	1999	MNNIT Allahabad	Allahabad University
M.E.	Embedded Systems	2004	SGSITS Indore	RGPV Bhopal
Ph.D.	ECE(Wireless Sensor Networks)	2018	-	Gautam Buddha University
Post Doc.	-	-	-	-

4. Research & Publications

Papers Published in Web of Science indexed Journals	International:05	National: 00
Papers Published in SCOPUS indexed Journals	International:05	National: 00
Papers Published in other Journals	International:06	National: 00

Papers Presented in Conferences / Symposium	International:08	National: 00
Book chapters Published	Name of the book chapter : Performance Analysis of SMAC Protocol in Wireless Sensor Networks Using Network Simulator (Ns-2) Publisher: **Springer, Berlin, Heidelberg, vol. 115, pp. 42-51, 2013**. (**Scopus Indexed**) Year of Publication:2013	
	Name of the book chapter: Medium access control in wireless sensor networks Publisher: CRC Press (Taylor &Francis), Florida, USA. ISBN: 978-1498783347, 2016.**(Scopus Indexed)** Year of Publication:2016	
	Name of the book chapter: Medium Access Control Protocols for Mission Critical Wireless Sensor Networks Publisher: (**Published on 9th February 2020 by Advances in Intelligent Systems and Computing (AISC), Springer.**) (**Scopus Indexed**) Year of Publication: 2020.	
	Name of the book chapter: Intelligent Invigilation using video surveillance Publisher: **Advances in Intelligent Systems and Computing, 2021 (AISC), Springer.) (Scopus Indexed)** Year of publication: 2021	

5. Research Guidance

PhD Guide? Give field & University	Yes(Co-Guide), Field :Wireless Sensor Networks	Name of University: Jaypee University
PhDs / Projects Guided	Ph.D. Awarded: - Guiding: 01	Projects at Master's Level: 10 Projects at Bachelor's Level: 45

6. Grants
i. Funds Received (Projects)

Project Name	Grant Amount	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
1. A Mission Critical Protocol for Pipeline Leakage Detection Using Wireless Sensor Networks	3.0 lacs	25th June 2019	1 year	Collaborative Research Innovation Program(TEQIP-III) under AKTU, UP
2. Sanjay: The Third Eye	12,000/-	March 2018	1 year	KCIIS, AKTU,UP
3. Eye-Vista- Smart	20,000/-	January	1 year	CST UP

	Assistance for Visually impaired		2020		

ii. Patents

Sl. No.	Title Details	Details of award of patent / Filed
1.	IoT based smart healthcare solution for predicting severity prognosis in heart patients using machine learning	**Application no:** 202111022490, date of filing: 20-05-21(published)
2.	IoT based smart healthcare solution for the Prognosis of skin cancer using machine learning	**Application no:** 202111040153 A, date of filing: 4/9/2021, date of published: 10/9/2021
3.	WSN AND INTERNET-OF-THINGS (IOT) ENABLED PIPELINE · LEAKAGE DETECTION SYSTEM AND METHOD"(Applicant: JSSATE, NOIDA)	**Application no:** 202011000000, date of filing: 17-08-20

iii. Consultancy

Title of the work	Amount in Rs.	Date of receiving the Grant	Duration	Grant issuing authority/ Body / Organization
-	**-**	**-**	**-**	**-**

7. Awards Received

Awards "Best Paper Award"	Nil

8. Publications
i. International Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
1.	MAC Protocol with Regression based Dynamic Duty Cycle	Gayatri Sakya and Vidushi Sharma	International Journal of Advanced Computer Science and Applications (IJACSA)	Vol. 8, Issue 6, pp. 198-206,2017	**WOS**	0.66	The Science and Information Organizati

	Feature for Mission Critical Applications in WSN						on
2.	ADMC-MAC: Energy efficient adaptive MAC protocol for mission critical applications in WSN	Gayatri Sakya and Vidushi Sharma	Sustainable Computing: Informatics and Systems	Vol. 23, pp. 21-28,2019	**SCIE**	**4.028**	Elsevier
3.	Performance evaluation of ADMC-MAC mission critical protocol for wireless sensor networks	Gayatri Sakya, Vidushi Sharma	Journal of Discrete Mathematical Sciences and Cryptography	Vol.22, Isuue 8, pp. 1407-1422,2020	**WOS/SC OPUS**	**.77**	**Taylor & Francis**
4.	WSN and IoT based smart city model using the MQTT protocol	Vishal Kumar, Gayatri Sakya & Chandra Shankar	Journal of Discrete Mathematical Sciences and Cryptography	Vol.22, Isuue 8, pp. 1423-1434	**WOS/SC OPUS**	**.77**	**Taylor & Francis**
5.	Machine learning based MAC Protocol Design for Pipeline Leakage Detection in Smart City Project	Gayatri Sakya, Chhaya Dalela , Laxman Singh, Anmol, Anuj Jain	Journal of Discrete Mathematical Sciences and Cryptography	Vol. 4, Isuue. 5, pp. 1283-1292	**WOS/SC OPUS**	**.77**	**Taylor & Francis**

ii. National Journals

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	WOS / Scopus / Both	Impact Factor	Publisher
-	-	-	-	-	-	-	-

iii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Conference	Volume No. Issue No. Year	WOS / Scopus	Impact Factor	Publisher
1.	Analysis of SMAC protocol for mission critical applications in wireless sensor networks	Gayatri Sakya, Vidushi Sharma, P.C. Jain	IEEE International Advance Computing Conference, IACC	IEEE pp. 488-492,2013	**Scopus**		**IEEE**
2	Performance analysis of SMAC protocol in wireless sensor networks using network simulator (Ns-2)	Gayatri Sakya, Vidushi Sharma	International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness	42-51.2013	**Scopus**		Springer, Berlin, Heidelberg
3	DVCCTA based High Input Impedance VIVO Biquad Filter	C. Shankar, S. V. Singh, Gayatri Sakya	2019 International Conference on Computing, Power and Communication Technologies (GUCON)	350-354,2020	**Scopus**		IEEE
4	Smart Agriculture System using Adhoc Networking among Firebird V	Gayatri Sakya and Ankit Gautam	6th International Conference on Innovative Research in Engineering Science and Management	ISBN: 978-81-932712-8-5,2016	-	-	International Journal of Innovations & Advancement in Computer Science

	Bots.		(ICIRESM-16) at The Institutions of Electronic and Telecommunication Engineers (IETE), Lodhi Road, New Delhi				(IJIACS) Volume, 5, 9-17,2016.

iv. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Faculty Development Program On Internet of Things (IOT) Using Amazon AWS	Organized by Finland Labs (A Unit of Revert Technology Pvt. Ltd. in Association with National Social Summit, IIT Roorkee	13th- 17th July 2020
2	Two Weeks Lecture Series on Research Trends in ICT	University School of Information and Communication Technology, Gautam Buddha University, Greater Noida - 201312, Uttar Pradesh, INDIA.	June 29, 2020 to July 9, 2020
3	One week workshop on Internet of Things	INTERNATIONAL CENTRE FOR ADVANCED RESEARCH AND STUDIES (ICARS), DELHI	June 22, 2020- June 26,2020
4	Two weeks faculty development program on Python	Organized by Department of Electronics & Communication Engineering, JSS Academy of Technical Education, Noida and spoken tutorial project, IIT Bombay funded by National Mission on Education through ICT, MHRD ,Govt of India.	22nd June to 4th July 2020
5	Introduction to Machine Learning (12 Weeks	platform (swayam.gov.in),NPTEL	Jan-Apr 2020 semester
6	Cloud Computing" (8 weeks)	on the SWAYAM	Jan-Apr 2020 semester

	NPTEL course	platform (swayam.gov.in)	
7	One week workshop on Simulation and Data Analysis organized by the Gautam Buddha University, Greater Noida	Gautam Buddha University, Greater Noida	9th July 2012 to 14th July 2012.
8	Attended National Seminar on Recent Technological Developments in the field of Electrical Engineering (RTDEE-2013 conducted at JSSATE, Noida)	JSSATE, Noida	23rd August 2013 to 24th August 2013.
9	Attended Two days Embedded Systems and Robotics on E-Yantra IIT Bombay sponsored by MHRD through the National Mission on Education through ICT (NMEICT) conducted by at MGM College, Noida	conducted by at MGM College, Noida	4th August 2014 to 5th August 14
10	Completed STTP-RTICT'17 one week short term training program on Research Techniques in Information and Communication Technology conducted by GBU, Greater Noida	GBU, Greater Noida	30th January to 4th February, 2017.
11	Completed 15 days FDP on Entrepreneurship conducted by National Science & Technology Entrepreneurship Development Board (NSTEDBI), Department of Science and Technology, Govt. of India, New Delhi	National Science & Technology Entrepreneurship Development Board (NSTEDBI), Department of Science and Technology, Govt. of India, New Delhi	12th -25th February 2018.
12	Attended 0ne week FDP on "Next Generation Nano Satellite Communication Systems"	AKTU, LUCKNOW.	07th May - 11th May, 2018
13	Participated in Texas Innovation Design contest by TI &DST	TI &DST	*2018*

v. Workshops / Conference (Organized)

Sl. No.	Name of the workshop / Conference	Organized by	Date	Role
1	MODERATOR in Workshop on Internet of Things	INTERNATIONAL CENTRE FOR ADVANCED RESEARCH AND STUDIES (ICARS), DELHI	June 22, 2020- June26,2020	Moderator
2	6th International Conference on Advances in Computing, Communication and Informatics ICACCI'2017	6th International Conference on Advances in Computing, Communication and Informatics ICACCI'2017 held at Manipal University, Karnataka, India	13th September to 16th September 2017.	TPC Members/Reviewer
3	Conducted Two days workshop on Wireless Sensor Network using NetSim in association with TetCos Bengluru at JSS Academy of Technical Education, Noida	in association with TetCos Bengluru at JSS Academy of Technical Education, Noida	from 28th October to 29th October 2015.	Coordinator
4	GUCON 2019 International Conference.	Galgotia University	2019	TPC member and reviewer
5	Conference: Intelligent Control and Computation for Smart Energy and Mechatronic Systems (ICCSEMS-2020) .	JSS Academy of Technical Education, Noida.	24 th -26 th Sep 2020	Publication Committee

vi. Conference Attended (those sponsored by AICTE / ISTE/IETE/TEQIP or any other sponsoring body)

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	AICTE approved two Weeks Workshop on Recent Trend in Wireless Communication organized by	Galgotia University, Greater Noida	2nd July 2012 to 15th July 2012.

	Galgotia University, Greater Noida		
2	Attended AICTE approved one week workshop on Wireless LAN's in National Institute of Technical Teacher's Training & Research (NITTTR), Chandigarh	National Institute of Technical Teacher's Training & Research (NITTTR), Chandigarh	30th July 2012 to 4th August 2012.
3	Attended MHRD sponsored two week workshop on Signals and Systems conducted by IIT Kharagpur & IIT Mumbai	by IIT Kharagpur & IIT Mumbai	2nd Dec 2014 to 12th Dec 2014.
4	Participated in INSPIRE Internship Science Camp – 2016 organized by Department of Science and Technology (DST), Ministry of Science and Technology, Government of India at JSS Academy of Technical Education Noida	Department of Science and Technology (DST), Ministry of Science and Technology, Government of India at JSS Academy of Technical Education Noida	26th December 2016 to 30th December.

9. Details of NPTEL / COURSERA courses completed

Sl. No.	Name of the subject	Organized by	Date of completion / Award	Grade / Marks
1	Introduction to Machine Learning (12 Weeks)	NPTEL ,IIT Bombay	Jan-Apr 2020 semester	72%
2	Cloud Computing" (8 weeks) NPTEL course	NPTEL, IIT Kharagpur	Jan-Apr 2020 semester	62%

10. Membership of Professional Bodies:

1. IEEE membership : 92170331
2. IETE membership

11. Any other information you will like to share about your professional experience

1. Faculty-in-charge and coordinator of e-Yantra Embedded Systems and Robotics Lab.

2. In the year 2019, best feedback certificate is given by JSSATE, Noida

3. Financial Assistance of 2.25 lakhs from **JSSATE, Noida** is sectioned for SHOWCASE of project Title "Sanjay: The Third Eye", selected in the 2019 Defense TechConnect Innovation Summit & Expo, collocated with the Smart Cities Connect Fall Conference and SBIR/STTR Fall Innovation Conference, October 8—10, 2019, at the Gaylord National Convention Center, National Harbor, Maryland, U.S.A.